

## DAFTAR ISI

<b>Abstrak.....</b>	<b>iii</b>
<b>Abstract.....</b>	<b>iv</b>
<b>Lembar Pengesahan.....</b>	<b>v</b>
<b>Lembar Pernyataan Orisinalitas.....</b>	<b>vi</b>
<b>Kata Pengantar.....</b>	<b>vii</b>
<b>Daftar Isi.....</b>	<b>viii</b>
<b>Daftar Gambar.....</b>	<b>xi</b>
<b>Daftar Tabel.....</b>	<b>xii</b>
<b>Daftar Lampiran.....</b>	<b>xiii</b>
<b>Daftar Simbol.....</b>	<b>xiv</b>
<b>Daftar Istilah.....</b>	<b>xv</b>
<b>Bab I Pendahuluan.....</b>	<b>1</b>
I.1 Latar Belakang.....	1
I.2 Perumusan Masalah.....	3
I.3 Tujuan Penelitian.....	4
I.4 Batasan Penelitian.....	4
I.5 Manfaat Penelitian.....	4
I.6 Sistematika Penulisan.....	4
<b>Bab II Tinjauan Pustaka.....</b>	<b>6</b>
II.1 Manajemen Aset.....	6
II.2 Maintenance.....	7
II.3 Data Mining.....	8
II.4 Machine Learning.....	8
II.5 Deep Learning.....	9
II.6 Klasifikasi.....	10

II.6.1 Support Vector Machine.....	10
II.6.2 Logistic Regression.....	11
II.6.3 Feedforward Neural Network.....	12
II.6.4 Recurrent Neural Network.....	13
II.7 Hyperparameter.....	14
II.8 Underfitting dan Overfitting.....	15
II.9 Penelitian Sebelumnya.....	16
II.10 Alasan Pemilihan Algoritma <i>Machine Learning</i> dan <i>Deep Learning</i> .....	17
<b>Bab III Metodologi Penelitian.....</b>	<b>19</b>
III.1 Pengembangan Model Konseptual.....	19
III.2 Sistematika Penyelesaian Masalah.....	20
III.3 Perancangan Model <i>Machine Learning</i> dan <i>Deep Learning</i> .....	21
III.4 Pengumpulan Data.....	22
III.5 Pengolahan Data atau Proses Pengembangan Produk / Artifak.....	23
III.5.1 Business Understanding.....	23
III.5.2 Data Understanding.....	23
III.5.3 Data Preparation.....	23
III.5.4 Modeling.....	24
III.5.5 Evaluasi.....	24
III.5.5.1 Confusion Matrix.....	24
III.5.5.2 AUC & ROC Curve.....	26
III.5.6 Deployment.....	28
<b>Bab IV Analisis dan Perancangan.....</b>	<b>29</b>
IV.1 Dataset.....	29
IV.2 Pemilihan Variabel <i>Input</i> .....	32
IV.2.1 Feature Importance.....	32

IV.2.2 Correlation Matrix with Heatmap.....	33
IV.3 Distribusi Data <i>Training</i> dan <i>Testing</i> .....	36
IV.4 Spesifikasi Kebutuhan Teknologi.....	38
<b>Bab V Implementasi dan Pengujian.....</b>	<b>39</b>
V.1 Hasil Perancangan <i>Classification Model</i> .....	39
V.1.1 Support Vector Machine.....	39
V.1.2 Logistic Regression.....	39
V.1.3 Feedforward Neural Network.....	40
V.1.4 Recurrent Neural Network.....	42
V.2 Hyperparameter Optimization.....	43
V.3 Hasil Pengujian Klasifikasi dengan <i>Confusion Matrix</i> .....	45
V.4 Training Accuracy dan Testing Accuracy.....	46
V.5 ROC Curve.....	47
V.6 Deployment.....	49
<b>Bab VI Kesimpulan dan Saran.....</b>	<b>51</b>
VI.1 Kesimpulan.....	51
VI.2 Saran.....	51
<b>Daftar Pustaka.....</b>	<b>52</b>